Brian Schweitzer, Governor

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ADMINISTRATIVE AMENDMENT TO MONTANA AIR QUALITY PERMIT

Date of Mailing: June 2, 2008

Name of Applicant: Knife River Corporation

Source: Portable crushing/screening plant.

Location: Various locations around Montana.

Proposed Action: The Department of Environmental Quality (Department) proposes to issue an Administrative Amendment, with conditions, to the above-named permittee. The permit will be assigned #2689-04. The permittee may appeal the Department's decision to the Board of Environmental Review (Board). A request for hearing must be filed by June 17, 2008. This permit shall become final on June 18, 2008, unless the Board orders a stay on the permit.

Proposed Conditions: See attached.

Procedures for Appeal: The permittee may request a hearing before the Board. Any appeal must be filed before the final date stated above. The request for hearing shall contain an affidavit setting forth the grounds for the request. Any hearing will be held under the provisions of the Montana Administrative Procedures Act. Submit requests for hearing in triplicate to: Chairman, Board of Environmental Review, P.O. Box 200901, Helena, Montana 59620.

For the Department,

Vicky Walsh

Vickie Walsh

Air Permitting Program Supervisor Air Resources Management Bureau

(406) 444-3490

Christine A. Weaver Air Quality Specialist

Air Resources Management Bureau

Christa a. Wear

(406) 444-5287

VW:cw Enclosure

AIR QUALITY PERMIT

Issued To: Knife River Corporation

P.O. Box 9

Belgrade, MT 59714

Permit: #2689-04

Administrative Amendment (AA)
Request Received: 1/24/08

Department Decision on AA: 06/02/08

Permit Final: AFS #: 777-2689

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to Knife River Corporation (Knife River) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

SECTION I: Permitted Facilities

A. Plant Location

Knife River owns and operates a portable crushing/screening facility at various locations throughout Montana. MAQP #2689-04 applies while operating at any location in Montana, except within those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) nonattainment areas, those areas having a Department of Environmental Quality (Department)-approved permitting program, and those areas considered tribal lands. An addendum to MAQP #2689-04 will be required to operate in or within 10 km of certain PM₁₀ nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County. A list of the permitted equipment is contained in Section I.A of the permit analysis.

B. Current Permit Action

On January 24, 2008, the Department received a request to change the permittee name from JTL Group, Inc. to Knife River. The current permit action is an administrative amendment pursuant to ARM 17.8.764 that changes the permittee name as requested. In addition, regulatory references for the diesel engines were added, the engine sizes corrected to reflect the engine horsepower, and the emission inventory was updated.

SECTION II: Conditions and Limitations

A. Emission Limitations

- 1. All visible emissions from any Standards of Performance for New Stationary Source (NSPS)-affected crusher shall not exhibit an opacity of 15% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 2. All visible emissions from any other NSPS-affected equipment, such as screens or conveyor transfers, shall not exhibit an opacity of 10% or greater averaged over 6 consecutive minutes (ARM 17.8.340, ARM 17.8.752, and 40 CFR 60, Subpart OOO).
- 3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.304 and ARM 17.8.752).

- 4. Water and spray bars shall be available on site at all times and operated as necessary to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.749 and ARM 17.8.752).
- 5. Knife River shall not cause or authorize the use of any street, road or parking lot without taking reasonable precautions to control emissions of airborne particulate matter (ARM 17.8.308 and ARM 17.8.752).
- 6. Knife River shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749 and ARM 17.8.752).
- 7. Knife River shall not operate more than two crushers at any given time and the combined maximum rated throughput capacity shall not exceed 840 tons per hour (TPH) (ARM 17.8.749).
- 8. Combined crushing production from the two crushers shall not exceed 7,358,400 tons during any rolling 12-month time period (ARM 17.8.749).
- 9. Knife River shall not operate more than two screens at any given time and the combined maximum rated throughput capacity shall not exceed 600 TPH (ARM 17.8.749).
- 10. Combined screening production shall not exceed 5,256,000 tons during any rolling 12-month time period (ARM 17.8.749).
- 11. Knife River shall not operate more than two diesel-fired generators at any given time and the combined maximum rated design capacity of the engines shall not exceed 1369 horsepower (hp) (ARM 17.8.749).
- 12. The combined hours of operation of the two diesel-fired generators shall not exceed 4,700 hours of operation during any rolling 12-month time period (ARM 17.8.749 and ARM 17.8.1204).
- 13. If the permitted equipment is used in conjunction with any other equipment owned or operated by Knife River, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).
- 14. Knife River shall comply with all standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, as applicable (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
- 15. Knife River shall comply with all applicable standards and limitations, and the reporting, recordkeeping, and notification requirements contained in 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines and 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart IIII; ARM 17.8.342; and 40 CFR 63, Subpart ZZZZ).

B. Testing Requirements

- 1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures as specified in 40 CFR 60.675 must be performed on all NSPS-affected equipment to demonstrate compliance with the emission limitations contained in Section II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, General Provisions and Subpart OOO).
- 2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures manual (ARM 17.8.106).
- 3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

- 1. If this crushing/screening plant is moved to another location, an Intent to Transfer form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
- 2. Knife River shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.
 - Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).
- 3. Knife River shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include *the addition of a new emissions unit*, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must be submitted to the Department, in writing, 10 days prior to startup or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).
- 4. Knife River shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records complied in accordance with this permit shall be maintained by Knife River as a permanent business record for at least 5 years following the date of the measurement, must be available at the plant site for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).

- 5. Knife River shall document, by month, the combined crushing production from the two crushers. By the 25th day of each month, Knife River shall calculate the combined crushing production from the two crushers for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.8. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 6. Knife River shall document, by month, the combined screening production from the two screens. By the 25th day of each month, Knife River shall calculate the combined screening production from the two screens for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 7. Knife River shall document, by month, the hours of operation of the diesel-fired generator(s). By the 25th day of each month, Knife River shall calculate the hours of operation for the diesel-fired generators for the previous month. The monthly information will be used to verify compliance with the rolling 12-month limitation in Section II.A.12. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).
- 8. Knife River shall annually certify that its emissions are less than those that would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall comply with the certification requirements of ARM 17.8.1207. The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).

D. Notification

- 1. Within 30 days of commencement of construction of any NSPS-affected equipment, Knife River shall notify the Department of the date of commencement of construction of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
- 2. Within 15 days of the actual start-up date of any NSPS-affected equipment, Knife River shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
- 3. Within 15 days of the actual start-up date of any non-NSPS affected equipment, Knife River shall submit written notification to the Department of the initial start-up date of the affected equipment (ARM 17.8.749).

SECTION III: General Conditions

- A. Inspection Knife River shall allow the Department's representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (CEMS, CERMS) or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver The MAQP and all the terms, conditions, and matters stated herein shall be deemed accepted if Knife River fails to appeal as indicated below.

- C. Compliance with Statutes and Regulations Nothing in this MAQP shall be construed as relieving Knife River of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seg.* (ARM 17.8.756)
- D. Enforcement Violations of limitations, conditions and requirements contained herein may constitute grounds for MAQP revocation, penalties or other enforcement as specified in Section 75-2-401, *et seq.*, MCA.
- E. Appeals Any person or persons jointly or severally adversely affected by the Department's decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department's decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a MAQP by the Board postpones the effective date of the Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.
- F. Permit Inspection As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee Pursuant to Section 75-2-220, MCA, as amended by the 1991 Legislature, failure to pay the annual operation fee by Knife River may be grounds for revocation of this MAQP, as required by that section and rules adopted thereunder by the Board.
- H. Construction Commencement Construction must be begin within 3 years of MAQP issuance and proceed with due diligence until the project is complete or the MAQP shall be revoked (ARM 17.8.762).
- I. The Department may modify the conditions of this MAQP based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. Knife River shall comply with the conditions contained in this MAQP while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

Permit Analysis Knife River Corporation Permit #2689-04

I. Introduction/Process Description

Knife River Corporation (Knife River) owns and operates a portable non-metallic mineral processing plant.

A. Permitted Equipment

The portable crushing/screening facility consists of:

- Two crushers with a combined maximum material throughput capacity not to exceed 840 tons per hour (TPH),
- Two screens with a combined maximum material throughput capacity not to exceed 600 TPH.
- Up to two diesel-fired generators with their engine's combined maximum rated design capacity not to exceed 1369-horsepower (hp), and
- Associated material handling equipment.

B. Source Description

Knife River is allowed to move the portable crushing/screening facility to various locations throughout Montana, except those areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM_{10}) nonattainment areas, those areas having a Department of Environmental Quality (Department)-approved permitting program, and those areas considered tribal lands. An addendum to Montana Air Quality Permit (MAQP) #2689-04 will be required to operate in or within 10 km of certain PM_{10} nonattainment areas. A Missoula County air quality permit will be required for locations within Missoula County.

Knife River proposes to use this crushing/screening plant and associated equipment to crush and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the crushing/screening plant by a feeder, transferred by conveyor, and passed through the crushers. Materials are crushed by the crushers and sent to the screens. Materials are screened, separated, and sent to stockpile for sale and use in construction operations.

C. Permit History

On April 23, 1991, **MAQP #2689-00** was issued to McElroy and Wilken, Inc. (McElroy) to operate a 1988 Baromac Mark II Impact Crusher, a 1986 Humbolt Wedag Model B Crusher, and associated equipment.

On April 12, 1996, **MAQP** #2689-01 was issued to McElroy to allow the facility to operate at any location in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1, 1996, through September 30, 1996). Because the initial location was in or within 10 km of a PM₁₀ nonattainment area, the Department determined that the conditions contained in MAQP #2689-00 needed to be modified to limit the impact of the portable crushers' emissions on the PM₁₀ nonattainment area. The new conditions and reporting requirements were stated in **Addendum** #1 of MAQP #2689-01. MAQP #2689-01 replaced MAQP #2689-00 and Addendum #1 was established.

On December 13, 2000, McElroy requested a permit modification for the replacement of a 1988 Baromac Mark II Impact Crusher (225 TPH) with a 1999 Nordberg Cone Crusher (420 TPH). Because the replacement of the crusher resulted in the generation of particulate emissions of less than 15 tons per year (TPY), the Nordberg crusher was added in accordance with Administrative Rules of Montana (ARM) 17.8.705(1)(r).

Additionally, on January 12, 2001, McElroy requested that Addendum #1 to MAQP #2689-01 be updated to again operate in or within 10 km of certain PM₁₀ nonattainment areas during the summer months (April 1, 2001, through September 30, 2001). The MAQP was also updated to reflect the current MAQP language and rule references used by the Department. MAQP #2169-02 replaced MAQP #2169-01 and Addendum #2 replaced Addendum #1.

On June 6, 2007, JTL Group, Inc. (JTL) submitted a complete MAQP application for a modification to MAQP #2689-02. JTL requested the permit to be written in a de minimis friendly manner to allow JTL greater operational flexibility. In addition, JTL requested the ability to operate up to two crushers with a combined maximum rated throughput capacity not to exceed 840 TPH, up to two screens with a combined maximum rated throughput capacity not to exceed 600 TPH, and up to two diesel-fired generators with a combined maximum rated design capacity not to exceed 880-kilowatts (kW). In addition, JTL informed the Department that JTL had purchased McElroy years ago and that no representatives of McElroy existed to provide the Department with a Notice of Transfer of Ownership. JTL requested that the MAQP be transferred from McElroy to JTL. The current permit action incorporates JTL's requests into the permit. Further, the MAQP format, language, and rule references were updated to reflect the current format, language, and rule references used by the Department.

JTL's application originally requested an addendum to the MAQP to allow operation in or within 10-km of certain PM_{10} nonattainment areas. Through further discussions with JTL, JTL determined to wait and add an addendum at a later date because JTL only expected to use the facility near PM_{10} nonattainment areas during the winter season and they did not know the locations that would need to be included in the addendum. **MAQP** #2169-03 replaced MAQP #2169-02. An addendum would be required to operate in or within 10-km of certain PM_{10} nonattainment areas.

D. Current Permit Action

On January 24, 2008, the Department received a request to change the permittee name from JTL to Knife River. The current permit action is an administrative amendment pursuant to ARM 17.8.764 that changes the permittee name as requested. In addition, regulatory references for the diesel engines were added, the engine sizes corrected to reflect the engine horsepower, and the emission inventory was updated. **MAQP #2169-04** replaces MAQP #2169-03.

E. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the ARM and are available, upon request, from the Department. Upon request, the Department will provide references for location of complete copies of all applicable rules and regulations or copies where appropriate.

- A. ARM 17.8, Subchapter 1 General Provisions, including, but not limited to:
 - 1. <u>ARM 17.8.101 Definitions</u>. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
 - 3. <u>ARM 17.8.106 Source Testing Protocol</u>. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

Knife River shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

- 4. <u>ARM 17.8.110 Malfunctions</u>. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
- 5. <u>ARM 17.8.111 Circumvention</u>. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.
- B. ARM 17.8, Subchapter 2 Ambient Air Quality, including, but not limited to:
 - 1. ARM 17.8.210 Ambient Air Quality Standards for Sulfur Dioxide
 - 2. ARM 17.8.211 Ambient Air Quality Standards for Nitrogen Dioxide
 - 3. ARM 17.8.212 Ambient Air Quality Standards for Carbon Monoxide
 - 4. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
 - 5. ARM 17.8.223 Ambient Air Quality Standard for PM₁₀

Knife River must maintain compliance with the applicable ambient air quality standards.

- C. ARM 17.8, Subchapter 3 Emission Standards, including, but not limited to:
 - 1. <u>ARM 17.8.304 Visible Air Contaminants</u>. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
 - 2. <u>ARM 17.8.308 Particulate Matter, Airborne</u>. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, Knife River shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
 - 3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
 - 4. <u>ARM 17.8.310 Particulate Matter, Industrial Process</u>. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.
 - 5. <u>ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel</u>. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
 - 6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
 - 7. ARM 17.8.340 Standard of Performance for New Stationary Sources. This rule incorporates, by reference, 40 Code of Federal Regulations (CFR) 60, Standards of Performance for New Stationary Sources (NSPS). Knife River is subject to the following NSPS:
 - a. 40 CFR 60, Subpart OOO Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing/screening plant to be subject to the requirements of 40 CFR 60, Subpart OOO, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by Knife River, the crushing/screening equipment is currently an NSPS-affected facility because of the equipment operational sizes and equipment dates of manufacture that are allowed to operate under the current permit conditions.
 - b. 40 CFR 60, Subpart IIII Stationary Compression Ignition Internal Combustion Engines, applies to any diesel generator manufactured after April 1, 2006, or modified or reconstructed after July 11, 2005. This NSPS will apply if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

Since the permit is written to allow Knife River to operate any two diesel generators powered by eengines up to a total of 1369-hp (generators at 880-kW), this regulation may apply if the engine(s) remain on site for over a year.

- 8. <u>ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories</u>. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
 - a. <u>40 CFR 63, Subpart A General Provisions</u> apply to all equipment or facilities subject to an NESHAPs Subpart as listed below:
 - b. 40 CFR 63, Subpart ZZZZ National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. As an area source, any diesel RICE engine operated by Knife River that is new or reconstructed after June 12, 2006, will be subject to this MACT standard if the engine remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year.

As an area source, the diesel RICE at Knife River will be subject to this rule. However, although diesel RICE engines are an affected source, per 40 CFR 63.6590(b)(3) they do not have any requirements unless they are new or reconstructed after June 12, 2006. Since the permit is written to allow Knife River to operate any two diesel generators powered by engines up to 1369-hp (generators at 880-kW), MACT requirements may apply if the engine remains on site for over the specified timeframes.

- D. ARM 17.8, Subchapter 5 Air Quality Permit Application, Operation, and Open Burning Fees, including, but not limited to:
 - 1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. A permit fee is not required for the current permit action because the permit action is considered an administrative permit change.
 - 2. <u>ARM 17.8.505 Air Quality Operation Fees</u>. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

- E. ARM 17.8, Subchapter 7 Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:
 - 1. <u>ARM 17.8.740 Definitions</u>. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
 - 2. <u>ARM 17.8.743 Montana Air Quality Permits--When Required</u>. This rule requires a person to obtain an air quality permit or permit alteration to construct, alter, or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. Knife River has a PTE greater than 15 tons per year of particulate matter (PM), PM₁₀, oxides of nitrogen (NO_X), and carbon monoxide (CO); therefore, an air quality permit is required.
 - 3. <u>ARM 17.8.744 Montana Air Quality Permits--General Exclusions</u>. This rule identifies the activities that are not subject to the Montana Air Quality Permit program.
 - 4. <u>ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes</u>. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.
 - 5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements.

 (1) This rule requires that a permit application be submitted prior to installation, alteration, or use of a source. A permit application was not required for the current permit action because the permit change is considered an administrative permit change. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. An affidavit of publication of public notice was not required for the current permit action because the permit change is considered an administrative permit change.
 - 6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
 - 7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this permit analysis.
 - 8. <u>ARM 17.8.755 Inspection of Permit</u>. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
 - 9. <u>ARM 17.8.756 Compliance with Other Requirements</u>. This rule states that nothing in the permit shall be construed as relieving Knife River of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq*.

- 10. <u>ARM 17.8.759 Review of Permit Applications</u>. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
- 11. ARM 17.8.762 Duration of Permit. An air quality permit shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or altered source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
- 12. <u>ARM 17.8.763 Revocation of Permit</u>. An air quality permit may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
- 13. ARM 17.8.764 Administrative Amendment to Permit. An air quality permit may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.
- 14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an air quality permit may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an air quality permit may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.
- F. ARM 17.8, Subchapter 8 Prevention of Significant Deterioration of Air Quality, including, but not limited to:
 - 1. <u>ARM 17.8.801 Definitions</u>. This rule is a list of applicable definitions used in this subchapter.
 - ARM 17.8.818 Review of Major Stationary Sources and Major Modification--Source
 <u>Applicability and Exemptions</u>. The requirements contained in ARM 17.8.819 through
 ARM 17.8.827 shall apply to any major stationary source and any major modification
 with respect to each pollutant subject to regulation under the FCAA that it would emit,
 except as this subchapter would otherwise allow.

This facility is not a major stationary source since it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

- G. ARM 17.8, Subchapter 12 Operating Permit Program Applicability, including, but not limited to:
 - 1. <u>ARM 17.8.1201 Definitions</u>. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
 - a. PTE greater than (>) 100 tons per year of any pollutant;
 - b. PTE > 10 tons per year of any one hazardous air pollutant (HAP), PTE > 25 tons per year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
 - c. PTE > 70 tons per year of PM_{10} in a serious PM_{10} nonattainment area.
 - 2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing Air Quality Permit #2689-04 for Knife River, the following conclusions were made:
 - a. The facility requested a federally enforceable condition to limit its PTE NO_x to less than 100 tons per year.
 - b. The facility's PTE is less than 10 tons per year for any one HAP and less than 25 tons per year of all HAPs.
 - c. This source is not located in a serious PM₁₀ nonattainment area.
 - d. This facility is subject to current NSPS requirements (40 CFR 60, Subpart OOO and possibly Subpart IIII).
 - e. This facility is subject to area source provisions of a NESHAP standard (40 CFR 63, Subpart ZZZZ).
 - f. This source is not a Title IV affected source nor a solid waste combustion unit.
 - g. This source is not an EPA designated Title V source.
 - h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
 - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
 - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

Based on these facts, the Department has determined that Knife River will be a synthetic minor source of emissions as defined under Title V. However, if minor sources subject to NSPS are required to obtain a Title V Operating Permit, Knife River may be required to obtain a Title V Operating Permit.

ARM 17.8.1207, Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

III. **BACT** Determination

A BACT determination is required for each new or altered source. Knife River shall install on the new or altered source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. A BACT determination was not required for the current permit action because the permit change is considered an administrative permit change.

IV. **Emission Inventory**

Source	Tons per Year					
	PM	PM_{10}	NO _x	VOC	СО	SO _x
2 Crushers (840 TPH Combined Capacity)	4.42	1.97				
2 Screens (600 TPH Combined Capacity)	5.78	1.93				
Truck Unloading	0.06	0.06				
Material Transfer	4.12	1.36				
Pile Forming	11.83	5.65				
Bulk Loading	0.06	0.06				
Diesel Generators (Engine Capacity 1369-hp)	6.98	6.98	99.29	8.11	21.39	6.53
Haul Roads	12.68	3.60				
Total	45.93	21.61	99.29	8.11	21.39	6.53

V. Air Quality Impacts

Based on the relatively small amount of emissions resulting from the Knife River operation and the limits and conditions that would be included in MAQP #2689-04, the Department believes that the allowable/permitted emissions from this source will not cause or contribute to an exceedance of any ambient air quality standard while operating in any area classified as attainment or unclassified for the ambient air quality standards.

VI. Ambient Air Impact Analysis

The Department determined, based on the relatively small amount of emissions resulting from the Knife River facility and the limits and conditions that would be included in MAQP #2689-03, that the impact from this permitting action will be minor. The Department believes it will not cause or contribute to a violation of any ambient air quality standard.

VII. Taking or Damaging Implication Analysis

As required by 2-10-101 through 105, MCA, the Department conducted a private property taking and damaging assessment and determined there are no taking or damaging implications.

^{**}Hours of operation of the diesel generators were limited to keep NO_x emission below Title V Threshold.

VIII. Environmental Assessment

This permitting action will not result in an increase of emissions from the facility and is considered an administrative action; therefore, an environmental assessment is not required.

Analysis Prepared by: Christine Weaver

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